State of California
California Regional Water Quality Control Board
Colorado River Basin Region

MINUTES OF INFORMATIONAL PUBLIC WORKSHOP
Thursday, February 8, 2018, 1:30 pm – 2:450 pm
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive
Palm Desert, CA 92260

Regional Board Members Present:
Buford Crites(Vice-Chair), Tom Davis, Ed Muzik, Nancy Wright (Chair)

Board Clerk:
Mary Castaneda

Regional Water Board Counsel:
Katharine Budding, Catherine George, Office of Chief Counsel

Regional Water Board Executive Staff:
Jose Angel, Executive Officer (EO)

Presenters:
Cathy Sanford, Engineering Geologist

Regional Water Board Staff Present:
Abdi Haile, Joan Stormo, Kai Dunn, Scott Stormo, Jeong-Hee Lim, Maria Davydova

General Public:
Patrick Taber, Bureau of Indian Affairs
Will, Gonzalez, Coachella Valley Water District (CVWD)
Don Ackley, CVWD
Mike Nusser, CVWD
Angela Fasano, CVWD,
Zoe Rodriguez Del Rey, CVWD
Steve Bigley, CVWD
David Tate, Desert Water Agency
Berlinda Blackburn, City of Coachella Water Division
Brian Macy, Indio Water Authority

INFORMATIONAL WORKSHOP

Board Chair Nancy Wright started the workshop and stated that its purpose was for Regional Board Members to receive public input and a staff update on nutrients in groundwater in the Coachella Valley and provide direction to Board staff. Ms. Katharine Budding was introduced as the new Office of the Chief Counsel for the Region.

Coachella Valley Nitrate Assessment

Staff Report—Cathy Sanford (Engineering Geologist) presented the staff report, which consisted of an update on her research and preliminary findings on nitrates in groundwater in western Coachella Valley. Her presentation was posted on the Region's website, and included a detail historical account of land uses, population growth, septic systems, centralized sewage services, and groundwater quality in the Valley from the late 1930's through 2017, in 20-year reviewing periods. The main population centers in western Coachella Valley are Cities of Palm Desert, Rancho Mirage, Cathedral City, Palm Springs and the unincorporated communities of Bermuda Dunes and Thousand Palms. She reported the following findings:

- The Indio Groundwater Subbasin is a high-use, priority basin, which is susceptible to contamination from surface or shallow subsurface wastes discharges due to its permeable soils. She added that some groundwater areas in west Coachella Valley already report nitrogen concentrations above the maximum contaminant level (MCL) of 10 milligrams per liter (mg/L) as Nitrogen.

- Chemicals associated with domestic wastewater (e.g., septic systems) have been detected in groundwater;

- Fertilizers and pesticides have also been detected in groundwater, these constituents tend to be associated with golf courses and areas formerly used for agricultural purposes;

- There is a strong correlation between land uses and nitrate in groundwater over time;

- Today, most of the residents and business in western Coachella Valley have a centralized sewage collection, treatment and disposal wastewater facilities. However, there are clusters of medium- to high-density occupancy buildings (e.g., condominiums, mobile home trailer parks, etc.) within the above-mentioned population centers that continue to rely on septic systems for sewage services;

- The centralized sewage collection systems (i.e., pipes and related infrastructure) may be source of groundwater contamination when they fail and/or are leaking;

- The municipal wastewater treatment plants for the area are also sources of nitrates to groundwater;

Ms. Sanford answer Board members questions about impacted municipal wells, extent of impacts over the MCL, and septic systems effectiveness (lack thereof) to deal with nitrates in domestic wastewater. She mentioned that municipalities continue to grant exemptions to certain medium- and high-density occupancy buildings from having to connect to a centralized system in spite of centralized systems being available throughout the Valley. Additionally, she explained that the justification for the exemptions varies, but most of the exemptions are being granted based on costs to connect to the centralized systems.

She provided the following recommendations to address the problems and prevent additional negative impacts to groundwater quality:

- Track and address the threat from Septic Systems - Regional Water Board staff should continue to work with local cities to assess the degree of risk posed by septic systems in Coachella Valley and how to mitigate the risks. A database will be developed and

maintained to manage this information and use the information to develop water quality control policy as needed for these systems.

- Evaluate Existing Sewage Collection Systems – Through cooperation with wastewater agencies, staff should determine the degree to which sewer collection systems may be leaking raw sewage and contributing nitrate to groundwater.

- Groundwater Monitoring Program for Subbasin - Formulating a comprehensive, basin-wide groundwater monitoring plan is essential to evaluate the relative contribution of nitrate from discharges of domestic wastewater; landscaping/golf course operations; prior agricultural practices, and to identify whether domestic wastewater is from septic tanks or leaking sewer infrastructure. Regional Water Board should request key stakeholders (e.g., water and wastewater agencies, potential sources of nitrates, etc.) to submit a proposal to develop and implement such a program.

She concluded her presentation by noting that Regional Water Board may need to establish more stringent waste discharge requirements; expand or establish waste discharge prohibitions; and require cleanup and/or remedial programs in specific areas.

Following her presentation, Board staff answered Board members' questions regarding data availability and sources of data to characterize threats to groundwater from domestic sources (e.g., centralized sewer systems), septic system density and location guidelines (e.g., State Water Board OWTS Policy), and the extent to which the impacts from septic systems continue to manifest themselves even after the septic systems are eliminated. Staff also noted that currently none of the existing centralized wastewater treatment plants have treatment units to remove nitrates, but they all have existing conventional treatment capacity to connect all of the existing septic systems in the area.

Steve Bigley of Coachella Valley Water District (District) shared with the Board his perspective on the matter and how ag land uses and how wastewater disposal and reuse have significantly changed over time in the metropolitan area since the 1930's. He also mentioned that some of the groundwater problems are legacy from previous irrigation practices and clearing or "mesquite forests." He added that the District supports working with the land use agencies to encourage septic tank users to connect to existing centralized sewer systems, because the centralized systems have the capacity to take their wastes and that wastewater can also be reused on turf. He stated that this reuse attenuates constituents such as nitrogen and pharmaceuticals, and the District's goal is reuse all of its treated wastewater. Further, he stated that the District works closely with golf courses to ensure they implement efficient irrigation practices to prevent the type of groundwater contamination that occurred as a result of previous agricultural practices; and that it is also working with them to use shallow old wells to remediate the ground water by extracting water that is elevated in groundwater and using that for irrigation practices. He concluded his remarks by stating that the District looks forward to continue working with the Regional Water Board.

Mr. Crites asked what would the priority areas for Board action regarding septic systems. Ms. Sanford stated that Palm Desert, Palm Spring, and Rancho Mirage should be the priority. Board staff also answered questions from Messrs. Davis and Muzik about financial assistance (e.g., Prop 1 funds) to deal with the septic systems; the costs to connect the typical septic system to a centralized system ($8000 - $10,000). Chair Wright stated that she would like staff to work with the District and others on the groundwater monitoring network. She added that the information presented is all good information that will be utilized in the Groundwater Sustainability Plans that are due in 2022.

Mr. Angel provided an update on Total Dissolved Solids (TDS) site-specific objectives for groundwater in the Coachable Valley. He said staff has completed foundational work on TDS and received regulatory background and guidance from the Office of Drinking Water regarding the TDS Maximum

Contaminant Levels. He added that as a matter of policy the Regional Water Board can amend its Basin Plan to include those MCLs for groundwater in the Valley. Ms. Budding added that in establishing the objectives the Board needs to provide some flexibility to allow for recycled water or things that might have higher TDS levels when implementing the objectives.

Ms. Wright congratulated the award recipients of the California River Basin California Environmental Association. Awards given this year included:

- Plant of the Year Award for Small Size Plant: Coachella Sanitary District,
- Plant of the Year for Medium Size Plant: CVWD WRP10,
- Mechanical Technician of the Year: Andy Calhoun of Valley Sanitary District,
- Operator of the Year: Armando Mendoza of CVWD,
- Large Sewage Collection Systems; CVWD,
- Medium Sewage Collections Systems: City of Palm Springs,
- Small Sewage Collections Systems: City of Banning,
- Community Engagement and Outreach: City of Coachella Sanitary District, and
- Engineering Research & Achievement: Valley Sanitary District,
- Safety Plant of the Year: Valley Sanitary District.

She reported that the WQCC Meeting will be on October 23-24, 2018.

The Workshop adjourned at 2:45 p.m.